THE JOURNAL OF SCHOOL HEALTH

VOL. VII NO. 1

JANUARY
1 9 3 7

PUBLISHED BY
THE AMERICAN ASSOCIATION OF SCHOOL PHYSICIANS

"Back to Cod Liver Oil"

THE increasing number of antiricketics has caused thousands of physicians to "get back to cod liver oil," which they know from many years' experience has, with rare exceptions, prevented and cured rickets and exercised some inexplicable beneficial effect upon the upper respiratory tract. The principal drawback to cod liver oil has been the fact that some patients object to the dosage of 3 teaspoonfuls.

With these facts in mind we now offer two new cod liver oil products reinforced with potent liver oils from the percomorph fishes which make possible a dosage approximately $\frac{1}{10}$ and $\frac{1}{100}$ of cod liver oil.* All ordinary needs for vitamins A and D can now be met with these two new Mead products, priced economically for the patient and marketed strictly ethically:

MEAD'S COD LIVER OIL
Fortified With Percomorph Liver Oil

10 Times Cod Liver Oil* in Vitamins A and D

ENTIRELY a natural product containing 95% Mead's Cod Liver Oil and 5% Percomorph Liver Oil.† Has all the advantages of cod liver oil, but may be given in smaller bulk. One teaspoonful is more than equal in vitamins A and D content to 5 teaspoonfuls cod liver oil; hence it is especially desirable as a dietary supplement for growing children and adults. 6,000 A units and 850 D units (U.S.P. 1934 Rev.) per gram. Biologically assayed. 3 and 16 oz. bottles.

MEAD'S OLEUM PERCOMORPHUM, 50%

(Contains 50% cod liver oil)

100 Times Cod Liver Oil* in Vitamins A and D

CONTAINS 60,000 vitamin A units and 8500 vitamin D units per gram. 10 drops equals over 9 teaspoonfuls cod liver oil* in vitamins A and D potency. Especially useful where *natural* vitamins A and D are desired in maximum potency and minimum bulk, as for young infants, prematures, and pregnant women. Biologically assayed. 10 cc. and 50 cc. bottles.

*U.S.P. 1934, Rev. (600 A Units, 85 D units per gm.)

†A blend of liver oils from percomorph fishes, principally *Xiphias gladius, Pneumatophorus diego, Thunnus thynnus, Stereolepis gigas,* and closely allied species.

Please send professional card to Mead Johnson & Co., Evansville, Indiana, U.S.A., when requesting samples of Mead products to cooperate in preventing their reaching unauthorized persons.

THE

Vol.

Tuber

Speci

Curre

Edito

Abst

Note

THE JOURNAL OF SCHOOL HEALTH

Vol. VII JANUARY, 1937 No. 1

CONTENTS

Tuberculosis in Children 1

Report of the Tuberculosis Committee of the American Association of School Physicians.

Special Classes in a Co-ordinated School Health Program 9

John E. Burke, M.D., Assistant Superintendent of Schools, Schenectady, New York.

Current Developments in School Health Education 11

Sally Lucas Jean, Secretary, Health Section, World Federation of Education Associations.

Editorials 12

Abstracts 13

Notes 19

Published by

THE AMERICAN ASSOCIATION OF SCHOOL PHYSICIANS

883 Broadway, Albany, New York

Editorial Office, 3335 Main St., Buffalo, New York

Copyright January, 1937, by

The American Association of School Physicians

Entered as second-class matter at the Post-Office at Albany, N. Y. January 26, 1937

SEE how well they HEA

...*with* NEW Audiometer

that tests hearing more accurately

WESTERN ELECTRIC—pioneer maker of Audiometers—now offers an improved model. For many years the Western Electric 2A has been recognized as setting the highest standard of accuracy. The new 6A sets the standard still higher.

It provides test tones at any desired frequency from 100 to 10,000 cycles per second—tests by either air or bone conduction. And you can now test the bone conduction of each ear *separately*—thanks to Western Electric's new masking devic

When you record your Audiometr measurements on the Audiogram shov above, you see at a glance the extent a character of each patient's hearing lo And have a permanent record for co parison with subsequent tests.

Easily portable, the 6A is simple to u Moderate in price, it has many outstandi features described in our new bookl Write for yours to Graybar Electric C

Western Electric
AUDIOMETER
Distributed by GRAYBAR *Electric Company. Graybar Building. New York. N.*

THE JOURNAL OF SCHOOL HEALTH

Devoted to the interests and advancement of School Physicians and the service rendered by them. Your participation by membership is solicited.

VOL. VII JANUARY, 1937 No. 1

TUBERCULOSIS IN CHILDREN

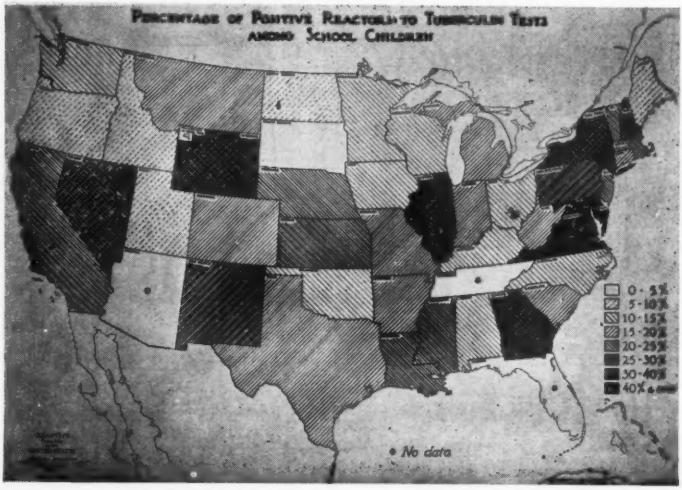
Report of the Tuberculosis Committee of the American Association of School Physicians, October 22, 1936

The Committee on Tuberculosis of the American Association of School Physicians, held a meeting in New Orleans on April 25, with Drs. Lees, Long, Ryan, and Myers present. Dr. H. E. Kleinschmidt of the National Tuberculosis Association and Dr. F. H. Arestad of the American Medical Association were invited to attend this meeting. Dr. Kleinschmidt was under the impression that the report of our meeting, which was held in the Trudeau Memorial Room at Saranac Lake, New York, in June 1935, had not been brought to the attention of many of the tuberculosis workers. Therefore, he proposed that we submit a copy to him to be published in the Bulletin of the National Tuberculosis Association. This report, which had previously been published in the School Physicians' Bulletin, was later submitted to Dr. Kleinschmidt and was published in the July 1936 issue of the Bulletin of the National Tuberculosis Association.

The committee discussed the possibilities of arranging for a special annual program in which the papers would be limited entirely to tuberculosis among school employees and school children. It was the consensus of opinion that one-half day might be devoted to this subject annually, and that the program should be arranged in conjunction with the meeting of an organization with a large membership, such as the American Public Health Association, the American Medical Association, or the National Tuberculosis Association. It was the desire of the committee that this subject be brought before the Association of School Physicians at the next annual meeting.

The members present were of the opinion that it would be desirable to enlarge our committee by three members: One who would take special interest in the study of tuberculosis among Negro children throughout the nation; another among the Jewish children enrolled in special or private schools; and another in the Indian children. Dr. Ryan kindly consented to take charge of the work among the parochial schools of the country. It was agreed that all members of the committee should encourage school physicians everywhere to increase tuberculosis work as much as possible in the public schools. Later, President Wilson appointed Dr. Hugh Browne of Alexander, Arkansas; Dr. J. B. Novak of Chicago, and Dr. H. A. Burns of Ah-Gwah-Ching, Minnesota, to the committee.

The Members of the committee were of the opinion that it would be worth while to continue our plans to prepare a map of the United States which would show, insofar as possible, the incidence of positive reactors among school children of the various states. It had already been learned that most of the secretaries of state tuberculosis associations throughout the country were willing to co-operate in the compilation of data. In fact, during the year 1935, correspondence had been carried on with the various state secretaries. Soon after the New Orleans meeting, each state tuberculosis secretary was asked to compile and submit as much information as possible regarding the number of children, including high school ages, who had been tested in each state, together with the incidence of positive reactors. From the data presented by the secretaries, the committee has prepared a map of the United States, a photograph of which is enclosed.



The map here presented is our first attempt to show incidence of first infection type of tuberculosis among the school children of the various states. The idea of presenting this map is by no means original with the members of this committee. It was borrowed from the veterinarians, who have found a map showing the incidence of positive tuberculin reactors among cattle most valuable in visualizing the distribution of tuberculosis throughout the country and in educating the public concerning this disease. The information has been secured for the most part from the offices of the state tuberculosis and public health associations. The secretaries in each of these offices have been most co-operative. Obviously, the first map will be incomplete and may not show a true picture of the actual situation in some of the states. This is largely because the method of attack varies.

For example, in some states large groups of children have been tested regardless of present health, history of contact, etc.; in other words, they were unselected, while in other states only children with definite history of contact have been included. Moreover, in some of the states the data had not been kept by the county organizations in such a way that the tests of adults could be separated from those of children. All of this indicates a standard form to be submitted to and approved, if suitable, by the various state association secretaries so that in the future the desired information would be readily available.

The preparation of a county outline map by the various state associations has stimulated further work of this kind, since several of the secretaries have stated that they plan to have large maps of their states prepared each year. These maps will facilitate visualization of the problem. For example, in one county or group of counties in a state the percentage of children reacting positively to the tuberculin test may be much higher than elsewhere. This should be an indication to concentrate effort. No state secretary should be ashamed of having reported only a small number of tuberculin tests during the year; the fact that the work has been initiated is very satisfactory and shows a beginning of what promises to be one of the great steps of all time in controlling tuberculosis among human beings. Throughout the period of accumulating data for the present map, there has been nothing so encouraging as to read in the letters from the various secretaries of the splendid plans that are being made for more extensive tuberculin testing in the future. In this report we have not included the number of clinical cases of tuberculosis discovered through the tuberculin test which have led to subsequent phases of the examination, either among the children, themselves, or their associates. However, it would seem desirable to do this in later reports.

The accumulation of data for the preparation of a map of the United States, showing the incidence of positive reactors among children, has brought to light a number of important facts. It was found that with reference to the use of tuberculin some states are employing the usual two test doses of Purified Protein Derivative; others use 0.01 milligram of Koch's Old Tuberculin for the initial test and repeat the negative reactors with a dose of one milligram. In some states, a full milligram of Koch's Old Tuberculin is used as the initial and final dose. In many places, only one test dose consisting of 0.1 milligram of Koch's Old Tuberculin is used. In one state a physician who has administered the tuberculin test for many thousand children and employs only one dose, consisting of 0.1 milligram, writes as follows: "I did not repeat the negative reactors with a stronger dose of tuberculin. In my work I do not have the extra time required to do 85 per cent of the pupils over. We feel that the educational feature of the Mantoux testing program is of the greatest importance and

so we prefer to do a larger group once rather than to repeat with a second dose. We are trying to put on a program that will be of the greatest good to the greatest possible number in the state." Thus, it is obvious that there is urgent need for a single dose test of tuberculin whether Purified Protein Derivative or Old Tuberculin is used. We can now recommend an intermediate PPD dose where it is necessary, and calculate the figure for the full dose pretty accurately.

In many places no tuberculin testing is being done unless funds are available to make X-ray films of all of the positive reactors. While this is the ideal procedure, at the same time when only funds are available for testing a great deal of information can be obtained with reference to the tuberculosis problem in the community by testing only the children. Finding through the test that a serious problem exists may suffice to stimulate greater interest which will lead to larger funds. On the other hand, if the problem is small, the pride of the community may be sufficient to put forth a serious effort to eradicate the disease completely.

The best criterion of the tuberculosis problem in any community is to be found in the incidence of positive reactors among the children, including the high school age. Moreover, a definite rate to mortality probably holds. Mortality rates do not always constitute a good criterion of the problem, because many persons who have tuberculosis in a communicable form die of other causes, nor do morbidity rates provide us with a satisfactory criterion, because a long period of time exists, after the disease is clearly demonstrable by modern methods of diagnosis, before illness appears. Many persons with communicable tuberculosis never actually become sufficiently ill to report to physicians for examination. Some of these persons remain in their communities as carriers and live beyond the average span of life. Moreover, in some states as many as 30 per cent of the tuberculosis case reports are first made by death certificate.

In a good many places only contacts of known cases of clinical tuberculosis are being tested with tuberculin. This is an excellent beginning in any community, for undoubtedly more children with first infection type of tuberculosis and more cases of clinical disease will be found per dollar spent than by any other method. Nevertheless, we must face the fact that this method does not bring to light many unsuspected carriers of tubercle bacilli which might be discovered when all the children of a community are tested.

Unfortunately, the X-ray film provides us with practically no information regarding etiology of shadows and, therefore, most experts in tuberculosis are reluctant to make diagnoses of tuberculosis in any form in the absence of positive tuberculin reactions. There is available some evidence of tuberculous lesions of the first infection type becoming completely healed; that is, all bacilli are destroyed and the tissues lose their allergy

as far as one is able to determine by the tuberculin test. Present evidence leads one to believe that this number is small. However, further observation may reveal larger numbers of such cases.

The securing of X-ray films of the chests of positive reactors has been a most difficult problem for some of the states because of their cost. For example, one secretary makes the following statement in the closing paragraph of his letter: "We are still hoping that your group may be able to get something done about reducing the cost of X-ray films." This problem can be met in part by concentrating the X-ray work on the age group where clinical tuberculosis is most likely to exist, and reducing or even omitting for the time being the X-ray film examination in the age group where this form of tuberculosis is rare, except when there are special indications for complete examination. For example, in Massachusetts, Chadwick has shown that among children positive to the tuberculin test who have not reached the high school age, only one in 3,300 shows evidence of the reinfection or clinical type of pulmonary tuberculosis, whereas among high school children one among 690 showed evidence of this type of disease. In many places, physicians and hospitals with X-ray equipment have provided a cost rate for survey work. This has been very helpful, and constitutes a valuable contribution on the part of such persons and institutions. The rapid method of making X-ray exposures on rolls of paper film has been found entirely satisfactory, and reduces the cost to such an extent that practically everyone can have X-ray films made of the chest. Subsequent to this examination, celluloid films are used by the local physicians for the periodic examinations of all found to have definite evidence of disease, as well as those who have questionable conditions. This method has been used in Connecticut and New Jersey in an extensive way. In Washington, D. C., more than 12,000 examinations were made, and in Brooklyn, films of the chest of several thousand high school children were made in this manner. The method has been found so satisfactory in every respect that we are now in a position to recommend it throughout the country.

The figures compiled by the various state tuberculosis associations do not include the tests administered by physicians in private practice. This is a very important point since in some states the physicians in private practice are administering the tuberculin test to large numbers of persons. This omission calls for a discussion of reporting to health authorities all children and adults who have only the first infection type of tuberculosis as indicated by a positive tuberculin reaction. In fact, this subject has been discussed in some states, and proposals for such reporting have been made. However, they have usually not been adopted, largely because most persons, including physicians, consider tuberculosis to be a disease only after symptoms are present or there are other definite manifestations

of clinical, progressive lesions. However, in at least one city, the health officer encourages the reporting of all cases of tuberculosis, including those who have only positive tuberculin reactions. Two separate files are kept: one containing the reports of persons who have clinical disease and the other containing those who have only the first infection type of disease. This latter file is of great value to the health officer, for he knows that all positive tuberculin reactors have been exposed to tuberculosis at some time, and in his epidemiological work he seeks the source of this exposure. Moreover, he knows that every positive tuberculin reactor has at least first infection type of lesions somewhere in the body and that such persons are potential cases of clinical tuberculosis; therefore, he desires to keep them under close observation; that is, to have them examined adequately at least once a year for beginning clinical tuberculosis. The findings are sufficient to reward all effort and expenditure of funds. One objection that has been offered to the reporting of cases who have only positive tuberculin reactions, as far as the best examination will reveal, is that the number of positive reactors is too large. This objection is being overcome by the rapid decline in the incidence of positive reactors in most parts of the country. Another objection is that once a person is reported to the health department he is stigmatized and may subsequently find it difficult to secure positions, life insurance, etc. This is not a valid objection because all reports of this kind are kept confidential by the health officer, as they are by physicians in private practice. Moreover, some life insurance companies are already requiring the tuberculin test, and it seems more than probable that the time is not far distant when this test will be a part of the examination of applicants of many life insurance companies. If all physicians in private practice were encouraged to report the positive tuberculin reactions found among the children and young adults of their clientele, a much better picture of the tuberculosis situation would be available in many communities than at present. While such a proceedure seems desirable, it is probable that many years of educational work will be necessary before it becomes a general practice.

A brief statement of the work done in each of the states is included, to present as far as possible the groups which were tested. One must constantly keep in mind that there has been no uniformity with regard to age, etc. However, as time passes and the amount of tuberculin testing has increased, a better picture of the tuberculosis situation should be available.

Alabama.—In this state most of the tuberculin testing has been done on contacts and selected groups. However, in Jefferson county 1,459 white school children were tested and 15.3 per cent were found to be positive.

Arizona.—Although some tuberculin testing has been done in this state, no data was available. However, an extensive program is under way and

a very definite effort is to be made to protect Arizona children against tubercle bacilli.

Arkansas.—A total of 9,259 children were tested, of whom 17.5 per cent reacted positively. A fine tuberculosis control program is under way in this state.

California.—In this state 39,307 children were tested and 22.6 per cent reacted positively. The highest incidence of positive reactors for any county was 65.3 per cent; the lowest 13.5 per cent. A very extensive program is in progress in California and many adults are being tested, as well as children.

Colorado.—Here 1,417 children had tuberculin tests administered of whom 17.6 per cent reacted positively. The highest incidence of positive reactors for any county was 33.3 per cent; the lowest 7.9 per cent. No report was available from the large cities.

Connecticut.—In Hartford and East Hartford where attempts have been made to examine entire school groups, 3,598 children were tested and 16.9 per cent reacted positively. The work in Connecticut is almost entirely on a town or city basis. Considerable testing has been done in various parts of the state but most of the work has been with selected groups.

Delaware.—In this state 684 tests were administered to school children and 34.5 per cent reacted positively.

District of Columbia.—In Washington 2,247 junior and senior high school students were tested and 46.4 per cent reacted positively. In addition to this work $99,000 was available to the health department for a WPA case-finding project as a part of which 12,504 persons had X-ray films made of the chest by the rapid method.

Florida.—Here 15,000 children were tested, including both white and colored, but it was impossible to secure the percentage of positive reactors from the various local organizations in time for this report.

Georgia.—In this state 15,560 tests were administered and 37.7 per cent were positive. This figure has been used for the state, but it probably is too high inasmuch as nearly all of the work was done on contacts or suspects through a case-finding project. Moreover, this figure includes both whites and Negroes. In one county, however, the incidence of positive reactors was only 7.6 per cent. The testing of whole school groups with no special selection, therefore, would probably show a much lower incidence of positive reactors.

Idaho.—In Idaho 34,514 tests were administered and 8.9 per cent reacted positively. The highest incidence of positive reactors for any county was 17.7 per cent; the lowest 2.3 per cent.

Illinois.—Here 41,750 children were tested and 29.2 per cent reacted positively. The highest incidence of positive reactors for any county was 58.3 per cent; the lowest 12.5 per cent. Many counties where testing

has not been done in the past have plans for a large program of this kind in the near future.

Indiana.—In Indiana 10,367 children were tested, and the incidence of positive reactors was 17.5 per cent. The highest percentage for any county was 46.8 per cent; the lowest 4.7 per cent. In this state, there has also been a good deal of testing among other groups, such as teachers, nurses and university students.

Iowa.—In Iowa 18,442 children were tested and 13 per cent reacted positively. The highest incidence of positive reactors for any county was 20.9 per cent; the lowest 3.6 per cent. Large numbers of other persons, including teachers, were tested in this state during the year. One large activity was known as the public health professional project.

Kansas.—Here 6,011 children were tested of whom 24 per cent reacted positively. The lowest percentage in any county was 6.2. A large program is being outlined for the near future when the work will be concentrated on contacts. Portable X-ray equipment is being contemplated.

Kentucky.—Here 43,196 children were tested, of whom 10.7 per cent reacted positively. In fourteen counties none of the children tested reacted positively. A serious effort has been made in this state to examine adequately for tuberculosis teachers and other school employees.

Louisiana.—In Louisiana 4,003 children were tested, of whom 22 per cent reacted positively. Considerable tuberculin testing other than that of children is under way in this state.

Maine.—Here 17,929 children were tested, of whom 9.8 per cent reacted positively. The highest percentage in any county was 11.1; the lowest 8.6. It is of interest to note that Maine was the first state to become completely accredited with reference to tuberculosis among cattle.

Maryland.—In this state, 1,675 children were tested, of whom 42.6 per cent were positive. A good many of the tests in this state were administered to contact children.

To be concluded in February Journal.

* * * * *

Cancer.—"Although the true death rate from the disease may not have increased, cancer still remains a major public health problem in this country. Malignant diseases in the United States rank second only to heart disease as a cause of death and are responsible for about 135,000 deaths each year. The number will undoubtedly increase as the population ages. —*Statistical Bulletin,* Metropolitan Life Insurance Company, October, 1936.

SPECIAL CLASSES IN A CO-ORDINATED SCHOOL HEALTH PROGRAM

JOHN E. BURKE, M.D.

Assistant Superintendent of Schools in Charge of Health, Physical Education, Social Adjustments, Public Schools, Schenectady, New York

The director of health work in the schools in Schenectady is medically trained. This director is a member of the Superintendent's cabinet and as such visualizes the whole school program. As a member of this cabinet, the health director brings to the Superintendent and other cabinet members information about the whole health program. In turn, he receives from the Superintendent and his cabinet help in making the best correlations with other school work.

The program is not unlike that recommended by the White House Conference. There is a Health Service, Health Teaching, and Physical Education Section. In addition to this the health director is held responsible for doing something about the many social problems that arise in the school system. Because of this assignment, it is the duty of the health director to make recommendations with reference to placements in various special classes. The director has the help of a full-time psychologist and a part-time psychologist in making the studies of the children before placements are made in special classes.

The largest special group is made up of children who are retarded mentally, who cannot keep pace with children in the normal school situations. One whole building is devoted to this type of child, where it is possible to classify them to the best social advantages. In this building the usual program is carried on. This consists of a great deal of manual work. Book work, however, is not neglected. Each child is given as much book work as he or she is able to take. In this school special attention is given to the correction of physical defects, and a half-time nurse and two full-time physical educators are engaged in our health program.

We also have open air classes for children who are undernourished. We are feeling that in due time we shall abandon this type of class, since it is costly and it is questionable whether or not we are warranted in giving this very special service to a limited group. A plan is now under consideration whereby it will be possible for any child to have a rest period, and to have his breakfast and noon day meals supplemented by some food. This service would reach all of our pupils. Such a plan will probably be put in operation in the near future.

Five corrective units are operated in five different parts of the city. Each unit has approximately thirty pupils in it. Children are sent from their regular schools to the nearest unit. In addition to carrying on their

regular school program, they are given individual corrective exercises in these classes. The classes are under the supervision of an orthopedic physician, and the actual corrective work is done by trained workers. As time goes on it is likely that these classes will be extended in number.

A sight saving class at the elementary level is operated, and children are assigned to this class in accordance with recommendations made by oculists. At the junior and senior high school levels we do not operate special sight saving classes. Special attention, however, is given to needy students, and in due time, when it appears just what is the best plan, we shall arrange that such a plan be established at the junior and senior high school levels. We also operate a class for deaf children at the elementary level. For those in need of special instruction in lip reading, provision is made by means of an itinerant teacher. Another itinerant teacher is engaged in helping those with defective speech.

At Sunnyview Hospital for crippled children, a class is operated by the school system for children who must be hospitalized. These children, as soon as physically able, find their way back into the school system through the corrective classes.

Briefly this is how Schenectady provides for our deviate children. All of these children participate in our health instruction program, which operates at all levels. They also participate in our physical education program.

The health program in the Schenectady schools is thought of in the wide sense of the term "health." Our thought is to make it possible for every child to develop his or her potentialities to the full, so that a healthy, adequate personality may go out into the world or into higher education ready to do his or her best.

* * * * *

Hearing.—" * * * * * Certainly accurate and periodic testing of school children is imperative and fortunately available through the 4A audiometer. It is entirely practical for a school population of 5,000 or above to own such a machine and for smaller communities to combine in purchasing one. The cost of up-keep is little if the machine is properly handled.

"A child can be taught lip-reading more readily than can an adult, and it may be so thoroughly learned that under ordinary conditions a hard of hearing person could pass for one with normal hearing. If a school system is not large enough to warrant having a lip-reading teacher, arrangements may be made for an itinerant teacher. In very large schools it is even practical to have one of the grade teachers trained in lip-reading and speech correction."—Mrs. Myron F. Converse, Worcester Guild for Hard of Hearing, Worcester, Mass.—*Contact,* the Massachusetts Department of Public Health, December, 1936.

CURRENT DEVELOPMENTS IN SCHOOL HEALTH EDUCATION*

SALLY LUCAS JEAN, *Secretary*

Health Section, World Federation of Education Associations

The interest of educators in health promotion is not confined to the United States, as they have demonstrated by participation in six biennial meetings of the Health Section of the World Federation of Education Associations held in San Francisco; Edinburgh, Scotland; Toronto, Canada; Geneva, Switzerland; Denver; and Dublin, Ireland. This group was formed in 1923, and has functioned actively and continuously since that time.

In twenty-six countries a new stimulus has been furnished the membership through a visit of Dr. C. E. Turner, the chairman of the section, during 1935 and 1936. Since his return, Dr. Turner has secured funds to permit the establishment of a secretariat at 200 Fifth avenue, New York, with the Section Secretary serving as executive.

In many countries, school administrators, specialists in education whose field has a bearing on health, public health workers, school doctors, dentists, and nurses recognize the strategic position held by educational systems, and are making definite and effective efforts to promote health through their schools.

Much enthusiasm is displayed in health teaching methods developed in the United States, and a readiness to accept our plans which are not always sufficiently effective to warrant duplication. Then, too, many of the nations have a majority group who live on a lower economic level than do the people of the United States. This makes it necessary to work out special plans, and to adapt only such of those as are suitable for all humans.

The secretariat is now serving as an exchange of information through Regional Correspondents who have been appointed in the various countries. Suitable materials are collected by the secretariat and furnished these representatives, who then pass them on to their constituent groups.

Much enthusiasm is now being exhibited in the Seventh Biennial Conference of the Health Section to be held in Tokyo, Japan, August 2-7, 1937, where leaders from many countries will discuss Health Education, Health Services, and Physical Education. It is anticipated that a large and selective group of leaders from the United States will participate in the conference.

*Presented at regional meeting of the American Association of School Physicians, Washington, D. C., December 29, 1936. Summarized by author.

EDITORIALS

"NISI CRESCO MORTUUS"

With this issue, the *School Physicians' Bulletin* appears under new editorship. This change has been made at the request of William A. Howe, M.D., whose earnest, efficient, and multitudinous efforts and activities created the American Association of School Physicians, and started the Bulletin.

For nine years, the interest and labor of Dr. Howe have been largely instrumental in whatever growth and success the Association and its official Bulletin have achieved. As Secretary-Treasurer of the Association and Editor of the Bulletin, Dr. Howe has "carried on," extending his day, using his leisure, and his strength and energy in our behalf. He now feels that he has earned a respite and an opportunity to enjoy freedom from the irritating and energy-consuming routine of collecting and editing material for a periodical appearing ten months each year.

In this new aim of *living*, the new editors and—we are sure—the members of the Association, wish Dr. Howe full and happy success.

* * * * *

With this issue, too, the official publication of the Association appears in a new dress, and, by vote of the Executive Committee, with a new title which has the almost unanimous approval of that committee. In so far as possible, then, the *Journal of School Health* is your journal. It can succeed only by means of your fullest and heartiest co-operation and support.

The Editor-in-Chief wishes to express his personal gratification over the election as Associate Editor-in-Chief of Earle E. Kleinschmidt, M.D., who for several years has been, and still is, the Editor of the Bulletin of the Michigan Association of School Physicians.

* * * * *

We should change our point of view regarding the school children who come under our care and guidance.

Physicians are trained pathologically rather than physiologically, Basically, their aim is to find the worst in man, and, if possible, to ameliorate his physical condition. The real aim should be to "get the jump" on disease and abnormalities, and to provide such an environment, routine, and protection as will *prevent* the development of abnormalities and handicaps.

Such an aim necessitates a reversal of attitude, and a change in the method of attack. It demands a broadening in our concept of our functions and activities. Mere control of communicable disease, and the discovery of physical defects, while of great importance, are only the

beginnings of the campaign. We might call these the early objectives in the attack. Beyond and above these lie the key positions necessary to the maintenance of health—good family and school environment, adequate and proper sleep, rest, and recreation, scientific nutrition, and healthful restful mental attitudes.

Such a concept necessitates a broadening of information (education if you wish), a development of methods, and a consciousness of responsibility—to the child, to the community, and to oneself, that will make the school health service not merely a "sere and yellow leaf" on the tree of dead routine—but a real service for expanding child health, enjoyment, and true living.

* * * * *

ABSTRACTS

In May, 1936, the recently established Office of Public Health Education under Assistant-General L. R. Thompson of the United States Public Health Service began to publish monthly *The Health Officer,* a digest of current health information. *The Health Officer* contains much information of great value to school physicians, especially those who are responsible for the content or supervision of school or college courses in hygiene.

* * * * *

Public Health.—"What we need in North Carolina today is a health education program within the schools that is militantly purposeful in every respect, and that is supervised by, and is responsible to, one definitely known agency. Therefore, I recommend that consideration be given to the idea of establishing in North Carolina at the earliest possible time a department or agency whose chief duties will be the promotion of health education in the schools by co-ordinating and making more extensive and intensive the various health activities which do, or can, contribute to a sound health education program. Whether this department or agency would function under the State Board of Health or the State Department of Public Instruction is of secondary importance. I am interested solely in satisfying a real need. For the directorship of this department or agency, I would recommend a person with public health training and, if possible, with some background in pure educational work."—Charles F. Carroll, Jr., Superintendent of Swain County School, North Carolina. —*Contact,* the Massachusetts Department of Public Health, December, 1936.

* * * * *

"A wise physician is more than armies to the public weal."—*Pope.*

Health Examination Covers.—In Hartford, Connecticut, Dr. Wilson (formerly president of the American Association of School Physicians), is using newsprint paper bought inexpensively by the reel for covers during health examinations. A piece of paper the proper size is taken and a slit cut for the head.—*Contact,* December, 1936.

* * * * *

Resolution adopted by the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.—At its meeting in June, 1936, the above committee voted "That the said Joint Committee earnestly recommends to all school boards and school executives that surveys be instituted by competent engineers to ascertain whether or not the danger of back siphonage and consequent pollution of water supply mains exist in plumbing installations within their jurisdictions, and that such surveys be followed by prompt corrective measures."

* * * * *

Surveys.—The Massachusetts Department of Public Health, Division of Child Hygiene, is prepared to make a survey of any school health program followed by recommendations. Application must be made by the Superintendent of Schools. There is no charge. A limited number only of the surveys can be made during the school year. (This applies to Massachusetts only.)

* * * * *

Mortality Review.—The statistical bureau of the Metropolitan Life Insurance Company is publishing serially under the title "A Twenty-Year Mortality Review," a record of mortality by cause, age, sex, and color taken from the experience of the Metropolitan Life Insurance Company over the period 1911 to 1930. These records have much excellent material of great service to the teacher in public health or engaged in health instruction.

* * * * *

School Health in Scotland.—Among other things the Department of Health for Scotland in its report for 1935, discusses the following facts:

Dental Defects.—For a number of years the proportion of children found at school medical inspection to have decayed teeth has been about 70 per cent of those examined, and while there has been a slight improvement in the number of more seriously affected children, the incidence of dental caries among the school population is much greater than it should be.

Medical Inspection of the School Child.—Children attending schools under the supervision of education authorities in Scotland are medically examined three times during the course of their school life, viz., at ages 5, 9 and 13 years, with an additional examination for those continuing

school after the age of 14. In addition to these routine examinations, there are special examinations of children referred to school medical officers, by teachers, parents or school nurses, and re-examinations of children found defective at previous routine or special examinations.

Treatment of Defects.—When a child is found to be in need of treatment the parents are advised to seek medical advice. When the parents elect to have treatment by the family doctor or at a voluntary hospital, the case is followed up to insure that treament has been provided. If unable for financial reasons to obtain the necessary treatment, parents are offered the facilities provided at school clinics. So far as the Department has information, education authorities have interpreted generously the question of necessitousness in providing treatment of school children, particularly dental treatment.—*The Health Officer,* United States Public Health Service, November, 1936.

* * * * *

Health Program Study.—In the Journal of Educational Research for October, 1936, there is an excellent article, "Improvement in Educational Achievement Accompanying a Health Program," by Martha Crumpton Hardy of the Elizabeth McCormick Memorial Fund. Reprints may be secured from the Elizabeth McCormick Memorial Fund, Chicago, Illinois. This is a study conducted on primary school children in the public schools of Joliet, Illinois. The author's summary is as follows:

"The 409 elementary school pupils included in this investigation were all physically able to be in regular attendance, and could be said to form a representative sample of an average elementary school population. Their rate of educational development should have approximated the reported age and grade norms. On standardized tests participants in the health education projects exceeded the grade standards and one can be reasonably confident that these pupils were accomplishing more than is commonly expected of the average pupil in his progress through the intermediate grades. The non-participants while up to standard gave no indication of an accelerated rate of achievement.

"The consistency of the findings when the groups were alike at the beginning of the study with respect to age, general ability, school achievement, practice in the testing situation, and with respect to many aspects of home background and the general character of their school reactions, would seem to warrant the conclusion that the health education program, on the whole, had a stimulating effect on school achievement. However, there is no evidence that it was the health content of the teaching projects which resulted in the improvement. The entire set-up of the investigation, especially the phases involving conferences with teachers, principals, and parents, very likely served as a general incentive influencing teacher-

attitudes, methods of teaching, school atmosphere, and, indirectly, individual accomplishment. It is believed to be a composite of all these extrinsic situations interacting with an improved health regimen and physical conditions—in both of which the instructed pupils showed marked improvement—that was associated with the larger gains in educational achievement of the pupils who received special health instruction."

* * * * *

Plain Diphtheria Toxoid Favored.—Following the publication of the detailed study of diphtheria immunization with the one dose alum precipitated toxoid by Pansing and Shaffer (*American Journal of Public Health*, 26:8, 786-788, August, 1936), we note with interest that the California State Department of Public Health has advocated the use of plain toxoid, and has never favored the use of the alum toxoid. (*Weekly Bulletin*, California Department of Public Health, 15:39, 153-54, October 24, 1936.) The New York City Department of Health, also, has recently announced that the use of alum toxoid has been discontinued. Immunization of children at nine months of age and the administration of two doses of plain toxoid are now favored by the latter health agency. *The Health Officer*, December, 1936, p. 316.

* * * * *

Dental Trailer.—The Hospital Division (United States Public Health Service) is displaying a traveling dental unit to be placed in the Coast Guard Service. A complete dental clinic is housed in a modern trailer, and includes X-ray equipment, laboratory, sterilizer, as well as the patient's chair and all the necessary electrical equipment. Electricity is obtained by plugging in from the outside. The new unit will be used to take dental care to inaccessible Coast Guard stations.—*The Health Officer*, December, 1936, p. 314.

* * * * *

Health Teaching in Elementary Schools.—Health teaching in elementary schools is discussed by Miss Jean V. Latimer, Co-ordinator of Health Education, Massachusetts Department of Public Health, in a recent issue of *Contact*, a bulletin issued by the Public Health Department for the use of School Health Administrators and Medical Officers. The general school curriculum today presents units of study in which health education may readily be integrated, for example, such primary grade units as "Building and Furnishing a House," third grade units dealing with the provision of family food, shelter, and clothing, and the social studies of intermediate grades. Miss Latimer states that "the problem of health teaching in the elementary schools would seem to be that of guiding the everyday doings of the child into worthy and fruitful channels. * * * Such a theory of health teaching is sometimes called a theory of integration, that is, all the

health learnings are integrated and unified around healthy wholesome living."—*The Health Officer,* December, 1936, p. 315.

* * * * *

Sight Conservation.—The purpose of window shades is to control the amount of sunlight in the room: (1) by preventing sunlight from striking the faces of children; (2) by keeping it from falling on the children's work; (3) by diffusing it throughout the room; (4) by protecting the eyes of children from the glare from the sky or adjoining structures, and (5) by controlling the relative amount of light in the different parts of the room. To serve its purpose, the shade should be of a durable, soft-finished, cloth material that will not crack and let streaks of light into the room; it should have sufficient density to keep out the glare of sunlight, at the same time being sufficiently translucent to allow the light to diffuse through it; and it should be wide enough to make it possible to cover the sash completely. If the shades are to control the relative amount of light in the room, they must be hung so as to cover the lower half of the window without affecting the amount of light coming through the upper half.

Two shades hung at the middle of the window give the best results. Such an arrangement makes possible the independent control of sunlight entering through either sash. At the same time it gives the desks farthest from the windows the benefit of the light coming through the top part of the upper sash. The best shades include a V-shaped metal strip attached to the window to shut out the streak of sunlight that otherwise would enter between the rollers.

Briefly summarized in terms of what it means to the child, a well lighted classroom provides:

1. A minimum of ten foot-candles of light, artificial or daylight, on all working surfaces to safeguard eye efficiency and to reduce eye fatigue.

2. An absence of objectionable shadows on working surfaces to reduce further the possibility of muscular strain.

3. An absence of direct or reflected glare on working surfaces, from sunlight or from the source of artificial light, so that eye fatigue may be prevented as much as possible. Working surfaces include desks, tables, blackboards, and materials, such as paper.

4. An arrangement of working positions so that for child and teacher the source of light or its reflections are outside the field of vision, to reduce further the possibility of eye fatigue.

In conclusion, the eye efficiency of the child, the rate at which he works, his school achievement, and his eye health are influenced by classroom illumination.—From *Conserving the Sight of School Children.* A report of the Joint Committee on Health Problems in Education. Published by courtesy of National Society for the Prevention of Blindness, Inc. Publi-

Communicable Diseases of Childhood.—"The record in this group of causes of death is extraordinarily good. Each of the four principal communicable diseases of childhood established a new low record during the first nine months of 1936. The combined death rate, 6.7 per 100,000, is 38 per cent below the figure recorded at this time last year, and more than 80 per cent lower than the rate 10 years ago. The outstanding feature is the small number of deaths from measles so far this year."—*Statistical Bulletin,* Metropolitan Life Insurance Company, October, 1936.

* * * * *

Scarlet Fever Epidemic.—"An epidemic of scarlet fever believed to be milkborne has occurred in Owego, a village of approximately 5,000 inhabitants, in Tioga county, New York. The outbreak was reported on December 23, and is said to have begun about December 18. It is estimated that the number of cases may reach 700. The State Department of Health in co-operation with the local health officer is investigating the outbreak with a view to bringing it under control. The sale of the suspected raw milk was stopped on December 23."—*Health News,* January 4, 1937. New York State Department of Health.

* * * * *

Some Aspects of School Health Administration.—"Speaking before the American Association of School Physicians, E. S. Godfrey, Jr., M.D., New York State Commissioner of Health, stated that there must be co-operation between the school and the health officer just as there must be co-operation between the public and the health officer if the best results are to be obtained in communicable disease control. Rules made by competent boards of health after study of all of the epidemiological features are sufficient for control. Supplementary rules imposed by school officials, in his opinion, rarely accomplish any reduction in the community rates or improvement in the school attendance rate although they contribute to the annoyance of the public. In other words, exclusion of children from school after release from quarantine or isolation merely means that they are free to roam at large in the community. If they are capable of spreading disease they should either be quarantined or isolated for a longer period." *

"As to defects discovered at school examinations, they are, in the main, simply evidences of neglect during the preschool years. As such, they point to the need for better facilities for preschool care and for education of parents in having their children examined periodically during the preschool years and the defects corrected promptly."—*Health News,* December 7, 1936. New York State Department of Health.

*The control of communicable disease is, basically, the function of the Health Department. The objective of the School Department should be supplementary, and an enforcement—in and through the school so far as possible—of the rules and desires of the Health Department. Conditions suggested by Dr. Godfrey indicate a serious lack of co-operation between the two departments.—Ed.

NOTES

At its annual meeting in November, the Michigan Association of School Physicians "voted to change the name of the organization to the 'Michigan School Health Association.' The article pertaining to membership was changed so as to admit school dentists, nurses, and others interested in school health and who proved acceptable to the Board of Directors. Another change included a statement to the effect that the Board of Directors would henceforth consist of six members, a majority of whom should be school physicians."—*Bulletin,* Michigan School Health Association, December, 1936.

* * * * *

Of the officers and members of the Executive Committee of the American Association of School Physicians, the names of the following appear in the latest issue of *Who's Who in America:* John Sundwall, M.D., Ann Arbor, Michigan; James F. Rogers, M.D., Washington, D. C.; Haven Emerson, M.D., New York, N. Y.; Otis B. Nesbit, M.D., Gary, Indiana; Sven Lokrantz, M.D., Los Angeles, California; Charles H. Keene, M.D., Buffalo, N. Y.

* * * * *

At the annual meeting of the Pennsylvania State School Directors' Association to be held at Harrisburg, February 3, 1937, one of the speakers appearing before these members of local school boards of the Commonwealth is to be D. H. Lees, M.D., Director of Student Health Service, University of Pennsylvania. He will speak on "Control of Tuberculosis in Schools." Dr. Lees is a member of the very efficient committee of the American School Physicians Association on "Tuberculosis in School Children."

* * * * *

At the Second National Conference on College Hygiene, held at Washington, D. C., December 28-31, 1936, the American Association of School Physicians held a regional meeting for the benefit of those attending the conference. Three interesting programs were presented. Considering the multiplicity of other meetings and conferences being held by the College Hygiene Conference these programs were well attended.

* * * * *

During the period, October 21, 1936, to May 19, 1937, under the joint auspices of the National Congress of Parents and Teachers, the American Academy of Pediatrics, and the National Broadcasting Company, a radio forum is being presented, "On Growth and Development of the Child." The programs for January and February, 1937, are as follows:

January 20:

The Action of Glands on Growth.—Oscar Riddle, Investigator, Station for Experimental Evolution, Carnegie Institution of Washington.

January 27:

Effects of Light, Sun, and Other Rays on Growth.—Otto Glasser, Director, Department of Biophysics, Cleveland Clinic Foundation; Consulting Biophysicist, University Hospitals of Cleveland.

February 3:

Heredity or Environment.—E. C. MacDowell, Investigator, Station for Experienced Evolution, Carnegie Institution of Washington.

February 10:

How the Mind Grows in Infancy.—Arnold Gesell, Director, Clinic of Child Development, Yale University.

February 17:

How Children's Minds Grow.—Walter R. Miles, Professor of Psychology, Institute of Human Relations, Yale University.

February 24:

The Importance of Music for Growing Children.—Walter Damrosch.

These may be heard over N.B.C.-W.J.Z. Blue Network every Wednesday, 4:00-4:30 p. m., Eastern Standard Time.

The Journal of School Health

comes from the presses of The Fort Orange Press. Magazines and Books of this nature must have prompt and efficient attention. These together with complete equipment and low production costs permit low unit prices.

Inquiries are solicited

FORT ORANGE PRESS, Inc.,
883 Broadway, Albany, N. Y.

PROBLEMS OF BEHAVIOR
THE GROVE SCHOOL
Madison, Conn.
N. Y. 'Phone Watkins 9-0155

A progressive country boarding school, co-educational and non-sectarian, with completely individualized instruction, adhering to the curriculum of the New York State Board of Regents.

The Grove School is designed for NORMAL children, from three to eighteen, who have made an unsatisfactory adjustment at home or school. Its program lays special emphasis on habit re-education and character development.

JESS PERLMAN
Director

Beverly Farms, Inc. Home and school for nervous and backward children and adults. Successful social and educational adjustments. Occupational therapy. Dept. for birth injury cases. Healthfully situated on 220-acre tract, 1 hr. from St. Louis. 7 well-equipped buildings, gymnasium. 39th year. Catalog. Groves Blake Smith, M.D., Supt., Godfrey, Ill.